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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/038,327	01/02/2002	Thomas J. Wheeler	0275Y-000388	7251
27572	7590	12/01/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C.			DEXTER, CLARK F	
P.O. BOX 828			ART UNIT	
BLOOMFIELD HILLS, MI 48303			PAPER NUMBER	

3724

DATE MAILED: 12/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/038,327

Applicant(s)

WHEELER ET AL.

Examiner

Clark F. Dexter

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 August 2005.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 26-45 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 26-45 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☒ The drawing(s) filed on 23 August 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The amendment filed on August 23, 2005 has been entered.

### *Drawings*

2. The drawings were received on August 23, 2005. These drawings are acceptable.

### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 26, 30, 34, 35, 37, 42 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Holzer, Jr., pn 5,103,565.

Holzer discloses a support structure (e.g., 12) and a saw blade (e.g., 32) with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge on a first side and a back edge on a second side opposite said first side, said shank portion having a first edge (e.g., including the lower occurrence of 32a) generally extending from said cutting edge, a second edge (e.g., including the upper occurrence of 32a) generally extending from said

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back edge, and a rear mounting edge generally connecting said first and second edges, said second edge being laterally offset from said back edge forming a stepped portion therebetween, said second edge including an angularly disposed edge section (e.g., extending from the upper occurrence of 32a) proximate said rear mounting edge and disposed at an angle relative to said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade. It is noted that the recitation "generally defining a reciprocating axis of said saw blade" is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Holzer will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

5. Claims 26, 30, 34, 35, 37, 42 and 44 are rejected under 35 U.S.C. 102(b) as being anticipated by Langhoff, pn 5,306,025.

Langhoff discloses a support structure (e.g., including 22, 23) and a saw blade (e.g., 4) with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge on a first side and a back edge on a second side opposite said first side, said shank portion (e.g., see Fig. 6) having a first edge generally extending from said cutting edge, a second edge generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, said second edge being laterally offset from said back edge

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forming a stepped portion therebetween, said second edge including an angularly disposed edge section (e.g., at the uppermost end of 14 as shown in Fig. 6) proximate said rear mounting edge and disposed at an angle relative to said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade. It is noted that the recitation "generally defining a reciprocating axis of said saw blade" is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Langhoff will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

6. Claim 26, 34-37, 44 and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright, pn 5,433,457.

Wright discloses a support structure (e.g., including 88, 32 as well as unmarked features) and a saw blade (e.g., 50, 150, 302) with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge on a first side and a back edge on a second side opposite said first side, said shank portion (e.g., see Fig. 6) having a first edge generally extending from said cutting edge, a second edge generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, said second edge being laterally offset from said back edge forming a stepped portion therebetween, said second edge including an angularly disposed edge section (e.g., at the uppermost end

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of 14 as shown in Fig. 6) proximate said rear mounting edge and disposed at an angle relative to said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade. It is noted that the recitation "generally defining a reciprocating axis of said saw blade" is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Wright will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

7. Claims 26, 27, 30-33 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkinson et al., pn 3,033,251

Atkinson discloses a saw blade (e.g., 110, see Figs. 5 and 8) with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge (e.g., 114) on a first side and a back edge (e.g., 113) on a second side opposite said first side, said shank portion (e.g., see Fig. 5) having a first edge (e.g., the bottom edge in Fig. 5) generally extending from said cutting edge, a second edge (e.g., the top edge in Fig. 5) generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, said second edge being laterally offset from said back edge forming a stepped portion therebetween, said second edge including an angularly disposed edge section (e.g., at least the top right edge portion of the shank portion as viewed in Fig. 5) proximate said

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rear mounting edge and disposed at an angle relative to said cutting edge, said angularly disposed edge section generally defining a reciprocating axis of said saw blade. It is noted that the recitation "generally defining a reciprocating axis of said saw blade" is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Atkinson will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

8. Claims 26-28 and 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Beale, pn 3,977,287.

Beale discloses a saw blade with every structural limitation of the claimed invention including a body adapted for reciprocating engagement with a tool, said body including a cutting portion and a shank portion, said cutting portion having a cutting edge (e.g., 46) on a first side and a back edge (e.g., 44) on a second side opposite said first side, said shank portion having a first edge (e.g., the right edge in Fig. 2) generally extending from said cutting edge, a second edge (e.g., the left edge in Fig. 2) generally extending from said back edge, and a rear mounting edge generally connecting said first and second edges, said second edge being laterally offset from said back edge forming a stepped portion therebetween, said second edge including an angularly disposed edge section (e.g., the angled edge on either the top left or bottom left of the wider part of the shank portion as viewed in Fig. 2) proximate said rear mounting edge and disposed at an angle relative to said cutting edge, said angularly disposed edge

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section generally defining a reciprocating axis of said saw blade, and wherein the shank portion includes an aperture with a flat rear edge (e.g., at 38). It is noted that the recitation "generally defining a reciprocating axis of said saw blade" is considered to be a functional recitation of intended use of the claimed saw blade and support structure, and that the saw blade and support structure of Beale will meet this limitation if used in a tool that will reciprocate the saw blade and support structure in the claimed manner or otherwise used (e.g., in a hand tool) such that the saw blade and support structure will reciprocate in the claimed manner.

***Claim Rejections - 35 USC § 102/103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35



U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claim 32 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Langhoff, pn 5,306,025.

Langhoff discloses a saw blade (e.g., 4) with every structural limitation of the claimed invention including an angularly disposed edge section and a mounting edge perpendicular thereto (e.g., at the uppermost end of 14 as shown in Figure 6).

In the alternative, if it is argued that Langhoff does not disclose a mounting edge perpendicular to the angularly disposed edge section as claimed, the Examiner's position is that to make the angularly disposed edge and the mounting edge perpendicular to one another would be the mere discovery of the optimum or workable ranges within the general conditions of the prior art by routine experimentation and therefore obvious to one having ordinary skill in the art.

### ***Claim Rejections - 35 USC § 103***

11. Claims 27, 28, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holzer, Jr., pn 5,103,565 in view of Tseng, pn 5,664,792.

Holzer discloses a saw blade (e.g., 32) with almost every structural limitation of the claimed invention but lacks the shank portion having an aperture with a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture.

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Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Holzer for the well known benefits including that described above.

12. Claims 27, 28, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Langhoff, pn 5,306,025 in view of Tseng, pn 5,664,792.

Langhoff discloses a saw blade (e.g., 4) with almost every structural limitation of the claimed invention but lacks the shank portion having an aperture with a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture.

Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Langhoff for the well known benefits including that described above.

13. Claims 27, 28, 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright, pn 5,433,457 in view of Tseng, pn 5,664,792.

Wright discloses a saw blade (e.g., 50, 150, 302) with almost every structural limitation of the claimed invention but lacks the shank portion having an aperture with a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture. Therefore, it would have been obvious to one having ordinary skill in the art to

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provide such an aperture on the saw blade of Wright for the well known benefits including that described above.

14. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al., pn 3,033,251 in view of Tseng, pn 5,664,792.

Atkinson discloses a saw blade (e.g., 110; see Fig. 5) with almost every structural limitation of the claimed invention including an aperture (e.g., 116) that extends parallel to the angularly disposed edge, but lacks the aperture having a flat rear edge. However, the Examiner takes Official notice that such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture, wherein such an aperture configuration is provided to take advantage of tool fixing mechanisms such as that disclosed by Tseng. Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Atkinson for the well known benefits including that described above. It is noted that modifying the aperture (e.g., 116) of Atkinson by providing a flat rear edge such as that taught by Tseng would result in that flat rear edge being perpendicular to the side walls of the aperture and thus perpendicular to the angularly disposed edge of Atkinson.

15. Claims 37-39, 42 and 43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson et al., pn 3,033,251 in view of Holzer, Jr., pn 5,103,565.

Atkinson discloses a saw blade (e.g., 110, see Figs. 5 and 8) with almost every structural limitation of the claimed invention including a support structure, a recess (e.g., 116, claim 38) and a stop (e.g., 19, claim 38), and an aperture (e.g., 116, claim 39), but

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lacks the specifics of the support structure including two lateral walls and a base portion. However, such structure is old and well known in the art and has various well known benefits including facilitating mounting and dismounting of the saw blade. As one example, Holzer discloses examples of such support structure. Therefore, it would have been obvious to one having ordinary skill in the art to provide such a support structure along with the saw blade of Atkinson for the well known benefits including those described above.

16. Claims 40 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Atkinson et al., pn 3,033,251 in view of Holzer, Jr., pn 5,103,565 as applied to claims 37 and 39 above, and further in view of Tseng, pn 5,664,792.

The combination teaches and/or suggests a saw blade with almost every structural limitation of the claimed invention as described above, but lacks the aperture having a flat rear edge. However, such apertures are old and well known in the art and provide various known benefits including facilitating mounting and dismounting of the saw blade. Tseng discloses one example of such an aperture, wherein such an aperture configuration is provided to take advantage of tool fixing mechanisms such as that disclosed by Tseng. Therefore, it would have been obvious to one having ordinary skill in the art to provide such an aperture on the saw blade of Atkinson for the well known benefits including that described above. It is noted that modifying the aperture (e.g., 116) of Atkinson by providing a flat rear edge such as that taught by Tseng would

result in that flat rear edge being perpendicular to the side walls of the aperture and thus perpendicular to the angularly disposed edge of Atkinson.

### ***Response to Arguments***

17. Applicant's arguments filed August 23, 2005 have been fully considered but they are not persuasive.

In the fourth paragraph on page 9 of the response, applicant argues that the prior art fails to disclose an angularly disposed edge section generally defining a reciprocating axis of said saw blade. The Examiner respectfully disagrees. As described in the prior art rejections above, this limitation sets forth how the saw blade is used; that is, "an angularly disposed edge section generally defining a reciprocating axis of said saw blade" is the same as stating that the saw is reciprocated along an axis defined by the angularly disposed edge section. Because the applied prior art all have such an edge, and each are fully capable of being reciprocated along that edge (e.g., either by a tool/machine or by hand), it is respectfully submitted that the prior art meets the subject claim limitation.

### ***Conclusion***

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Clark F. Dexter whose telephone number is (571)272-4505. The examiner can normally be reached on Mondays, Tuesdays, Thursdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan N. Shoap can be reached on (571)272-4514. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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**Clark F. Dexter**  
**Primary Examiner**  
**Art Unit 3724**

cfd  
November 15, 2005